

Appl. No. : 09/409,818
Filed : September 30, 1999

IN THE CLAIMS:

Please amend the claims as follows.

1. (currently amended)

A method of creating a phase shift keying modulated signal, the method comprising:

reading a filter state;

selecting a new symbol;

determining a preferred signal path between said filter state and said new symbol;

retrieving, from a storage device, intermediate values that lie, between a first symbol and a second symbol, on the preferred signal path; and

using said intermediate values to generate said preferred path between said first symbol and said second symbol.

2. (original)

The method of claim 1 further comprising storing data points, representing intermediate values at equal time increments along said preferred signal path, between said first symbol and said second symbol, in said storage device.

3. (currently amended)

The method of claim 1, further comprising the step of: storing said intermediate values in a look-up table.

4. (original)

The method of claim 3, wherein said step of storing further comprises: storing said intermediate values as I and Q vectors.

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5. (original)

The method of claim 3, wherein said step of storing further comprises: storing said intermediate values as R and θ vectors.

6. (original)

The method of claim 3, further comprising the step of: using said first symbol and a digital filter state as an index for the look-up table.

7. (original)

The method of claim 3 further comprising the steps of: using a sample counter to generate a count signal; and
using said count signal as an index for said look-up table.

8. (original)

The method of claim 3 wherein said step of storing further comprises: storing said intermediate values in a non volatile electronic memory.

9. (currently amended)

The method of claim 3, the method further comprising the step of: generating data points that correspond to said preferred signal path between said first symbol and said second symbol [symbols].

~~10. (original)~~

The method of claim 9 wherein said step of storing further comprises: storing said look-up table in an electronic memory device.

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Claims 11-16 (withdrawn)

17. (original)

An apparatus for creating a phase shift keying modulated signal comprising:

a first storage device that stores a representation of a first symbol and generates a first index signal;

a second storage device that stores a representation of a second symbol and generates a second index signal;

a sample counter that generates a count signal that is representative of the number of samples between said first symbol and said second symbol; and

a look-up table that generates intermediate values between the first and second symbols in response to said first index signal, said second index signal, and said count signal.

18. (original)

The apparatus of claim 17, wherein said look-up table comprises an electronic memory containing signal values.

19. (original)

The apparatus of claim 17 wherein said look-up table comprises a look-up table that generates adjusted values, said adjusted values including a phase offset.

20. (original)

~~The apparatus of claim 17, wherein the look-up table comprises a look-up table that generates I and Q values.~~

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21. (original)

The apparatus of claim 17, wherein the look-up table comprises a look-up table that generates R and θ values.

22. (currently amended)

An apparatus that adjusts a phase portion [of a] independently of an amplitude portion of a phase shift keying (PSK) signal [(PSK)], the apparatus comprising:

a phase shift keying (PSK) signal generator that generates said [;] PSK signal;

a decomposition circuit that separates amplitude and phase components of said PSK signal to produce a PSK phase component signal and a PSK amplitude component signal;

a phase offset generator that generates a phase change signal; and

a summing circuit connected to said PSK phase component signal and said phase change signal that adjusts said phase portion of said PSK phase component signal in response to said phase change signal, and produces a phase adjusted phase component signal.

23. (currently amended)

The apparatus of claim 22 wherein [An apparatus as in 21 wherein] the PSK signal is the I component of a Multiple Phase Shift Keying signal.

24. (currently amended)

The apparatus of claim 22 wherein [An apparatus as in 21 wherein] the PSK signal is the Q component of a Multiple Phase Shift Keying signal.

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25. (currently amended)

The apparatus of claim 22 [An apparatus as in claim 21] further comprising:

a modulator that accepts the phase adjusted phase component signal and produces a modulated signal that is modulated by said phase adjusted phase component signal; and

an amplifier which receives said modulated signal and adjusts the amplitude of said modulated signal in proportion to said PSK amplitude component signal.